# Application for a variance from 21 CFR 1040.11© for a laser light show, display, or device. 430 2 99 JUN 21 AIO:37

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1.	name	OI C	ompany

Laser Technetics

2. Address of company

3716 Audley, Unit 8311 Houston, TX. 77098

3. Name and title of responsible person

Christopher L. Harris (Owner)

4. Telephone number

(972) 896-5684

5. Date of submission

6/15/99

6. The applicant requests the variance to be in effect for a period of \_\_\_\_\_ years from the date of issue.

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- 7. Product description and use
  - a. List name and/or model numbers for the laser light shows and projectors

Model number - LT1P0E.REV06011999 Serial number - 060119991LT

b. Product for which a variance is requested

A projector for a laser light show

- c. N/A
- d. Product is intended for use in a

Outdoor-unenclosed area

e. Product is intended to be used

VAR 1

994-2014

At a variety of (Tour) locations

#### f. Product is intended to be used at any one location

Less than 5 days

#### g. Tour is intended to run for

More than 6 months

#### h. Product utilizies the following laser effects

Aerial scanning.

#### 1. Laser Radiation Levels

```
Laser medium – Argon (Ar)
Wavelengths – 457.9nm, 476.5nm, 488nm, 496.5nm, 514.5nm.
Peak Power – 8 Watts
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## 2. If any laser radiation is pulsed or scanned, give the pulse duration and rate and scanning frequency and amplitude.

```
Pulse duration –
Rate –
Scanning frequency –
Amplitude –
```

Pulse duration, Rate, Scanning frequency, and Amplitude is usually measured at the closest human accessible place to the projector. Since this is an aerial projection there won't be any place within the projection area where a human could come in to contact with the beam. This means the pulse duration can vary because of the distance of the projector from the detector is infinite. The maximum projected energy would be 8 watts, this is when the beam is at a standstill, projecting in the sky.

#### 3. Reason for requesting variance

Compliance with the limits of 21 CFR 1040.11© would restrict the intended use of the product because compliance would limit the output power to the extent that the desired effects would not be sufficiently visible.

## 4. Manner is which it is proposed to deviate from the requirements of the applicable standard.

It is proposed to deviate from the provisions of 21 CFR 1040.11© in that the accessible level would exceed the accessible emission limits specified in 21 CFR 1040.11©

#### 5. Advantages to be derived from such deviation

Laser Light Shows and displays are accepted popular media in entertainment and the arts. Use of power levels in excess of the limits imposed by 21 CFR 1040.11(c) is necessary to achieve the required effects in these media.

### 6. Explain the alternative means of radiation protection to be provided.

(Check all boxes)

#### 7. Remarks

I, Christopher L. Harris will personally setup and run every show done by Laser Technetics under this variance. I am a experienced laser technician and hold a degree in Laser Electro-Optics. I believe my experience and knowledge in this field will enable me to perform an effective and most of all safe show.

8. Signature

9. Name (Type or print)

(hnistophen L. Harnis

10. Title

Laser Technetics
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Houston, TX.
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